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SUPERFUND RECORDS

JAN 3 1995

#119978

Site:	Maline Creek
ID:	MOD 94-1162
Page:	1.3
Date:	5-8-95
	1-3-95

MEMORANDUM

SUBJECT: Quality Assurance Sampling Plan
Collection of Air and Soil Samples for Asbestos
Residential Areas Near Certain-Teed/Maline Creek
St. Louis, Missouri

FROM: Douglas J. Brune
Environmental Engineer, EDSB/ENSV

THRU: Jeffrey A. Wandtke
Regional Quality Assurance Manager, EDSB/ENSV

TO: Don Hamera
OSC, EP&R

I have completed review of the subject document, prepared by the Technical Assistance Team (TAT) contractor, Ecology and Environment (E&E), and dated October 1994, according to Region 7 ENSV's Standard Operating Procedure (SOP) 1330.2, "Review of Quality Assurance Related Documents".

Attached please find Attachment A, "QA Document Review Checklist". Based on this completed checklist and the comments presented below, I am recommending approval with comment. Attached please find the completed signature approval page. A copy has been retained for R7QAMO records.

Project Objective

1. Scope of Work, §II.B. As we discussed the week of December 27, 1994, the scope is being modified to include all residents southeast of the site, not just those "affected by the flooding in August 1993".
2. Method Detection Limits, §V.B. Determinations for asbestos will be per the attached *Nonmandatory Transmission Electron Microscopy Method*, 40 CFR Part 763, Subpart E, Appendix A, not the National Institute for Occupational Safety and Health (NIOSH) method 7402.

Note: See Section D of the attached contains the quality control items.

The transmission electron microscopy (TEM) determinations generated in this sampling effort will provide for each asbestos the count in structures per square millimeter. According to

EDSB	EDSB
1/03/95 023	1/3/95 [Signature]

Asbestiform Fibers: Nonoccupational Health Risks, EPA 68-01-4655, page 84, counting, i.e., use of TEM, emphasizes "respirable dust".

As a result of the change in methodology, the data will not be compared to the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) of 0.2 fibers per cubic centimeter. Only fibers greater than 5 microns can be applied to the OSHA PEL.

Note: Unfortunately, there are no known standards for ambient concentrations of asbestos in air.

Sampling Procedures

1. Sampling Rationale/Methods, §III.A. Locations of the air samplers will be set as recommended by the Asbestos Hazard Emergency Response Act (AHERA)-certified air monitoring technician. However, proposed locations are as follows: the area west of the creek and east of the the residential neighborhood divided into three sectors, the residential neighborhood west of the site divided into three sectors, one in the middle of the former Certain-teed site, and one up-wind, or background. A collocated sampler is proposed for the sector south of the creek closest to the buried asbestos exposed by the Maline Creek. Finally, two blanks will be collected per the Subpart E protocol.

Note: The filters for sample collection will be provided by the lab.

Analytical Methods

1. Analytical Procedures, §V.A.

a) Determinations will be provided by Environment & Energy Consultants, St. Louis; I was unable to confirm their claim they were a National Institute for Standards and Technology (NIST)-approved lab. A list of "certified" labs is en route.

Note: It is important the lab realize it is to report the items detailed in Section I of the Subpart E protocol.

b) The modified Chatfield method for determinations of asbestos in soil was not contained in the subject document. Apparently, this is a modification of the Chatfield method for asbestos in floor tile. This appears to be acceptable.

If you have any questions, please contact me at x5180.

Attachments

R7QAMO Activity Number: 95-QQ1KF
R7QAMO Document Number: 95063

Attachment 2

QA Document Review Checklist

Project/Plan Name: Quality Assurance Sampling Plan; Collection of Air and Soil Samples for Asbestos; Residential Areas Near Certain-Teed/Maline Creek; St. Louis, Missouri

Activity Number: 95-Q01KF Document Number: 95063

Deficiencies were found in the elements checked below:
(See the attached review report for comments)

1. Project Objective

XXX Objective or scope of the data collection activity
 _____ Intended use of the data
XXX Action level, required detection limits, data quality objectives
 _____ Project participant/responsibility table; line authority diagram

2. Sampling Procedures

_____ Sampling network and rationale
 _____ Sampling schedule, locations, frequency, duration
 _____ Sample matrices, target analyte
XXX Sampling/decontamination procedures
 _____ Sample containers, preservation, holding times
 _____ Sample shipment/transportation, coordination with the laboratory
 _____ Sample custody and documentation of field activities

3. Analytical Methodology

XXX Quality of written procedure or choice of reference.
 _____ Method detection limit, precision, accuracy, comparability
 _____ Laboratory documentation

4. Field and Laboratory QC Samples

_____ Field QC elements
 _____ Laboratory QC elements
 _____ Frequency of QC checks
 _____ Control limits and corrective actions

5. Data Review, Validation and Reporting

_____ Review process
 _____ Acceptance/rejection criteria for validation
 _____ Data deliverables

_____ Approval Recommended R7QAMO Reviewer: Douglas J. Brune
XXX Approval Recommended w/Comments Completion Date: December 30, 1994
 _____ Resubmission Recommended

QUALITY ASSURANCE SAMPLING PLAN
FOR THE COLLECTION OF AIR AND SOIL SAMPLES FOR ASBESTOS ANALYSIS
FROM RESIDENTIAL AREAS NEAR THE CERTAIN-TEED/MALINE CREEK SITE

(BELLEFONTAINE NEIGHBORS, ST. LOUIS COUNTY, MISSOURI)

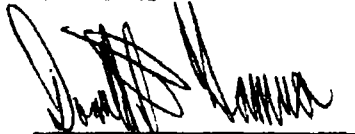
U.S. EPA REGION VII
EMERGENCY PLANNING AND RESPONSE BRANCH

and

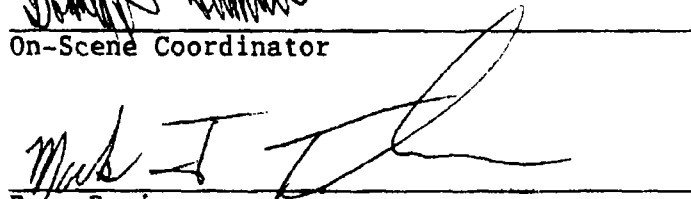
ECOLOGY AND ENVIRONMENT, INC.
TECHNICAL ASSISTANCE TEAM

October, 1994

APPROVED:


On-Scene Coordinator

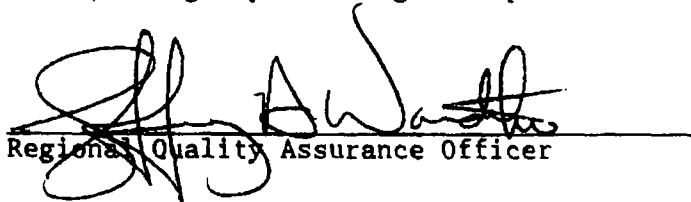
10/21/94
Date


Peer Reviewer

10/21/94
Date


Chief, Emergency Planning & Response Branch

12/22/94
Date


Regional Quality Assurance Officer

1/3/95
Date

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